

others have fallen on their route from Tartary is of course most probable; it is to be hoped that they may have passed into the hands of ornithologists, and that the facts may be made known.

Liverpool Free Public and Derby Museum,
September 14, 1859.

XII.—*On Birds collected or observed in the Republic of Honduras, with a short Account of a Journey across that country from the Pacific to the Atlantic Ocean**. By GEORGE CAVENDISH TAYLOR, F.R.G.S. Part II.

[Continued from page 24.]

1. HONDURAS MOCKING-BIRD. (*Mimus gracilis*.)

I did not observe Mocking-birds anywhere except on the plain of Comayagua. They were very pugnacious, and drove all other birds away from their vicinity.

2. BLUE BIRD. (*Sialia wilsoni*.)

Blue-birds were common among the pine-trees, on the high ridges, throughout the line of country we traversed.

3. HOODED WARBLER. (*Myiodiocetes mitratus*.)

The only one seen was in an orange-grove adjoining the town of Comayagua.

4. PAINTED FLY-SNAPPER. (*Setophaga picta*.)

This bird was obtained by Mr. Edwards near Comayagua.

5. DOMINICAN PURPLE MARTIN. (*Progne dominicensis*.)

Swallows were common, especially at Comayagua and in the neighbourhood of churches.

I shot one on the wing, while standing in the Plaza, in front of the Cathedral in Comayagua, to the great astonishment of many of the inhabitants, who had evidently never before seen anything shot while in motion. It measured 7 inches in length and $13\frac{1}{2}$ in extent. Eyes dark; beak, legs, feet, and claws black; chin and throat grey; under surface of body white; whole

* The scientific names used in this list are those adopted in Messrs. Selater and Salvin's article on the Ornithology of Central America, in 'The Ibis,' 1859.

upper surface, wings, and tail steel-blue ; tail forked ; 12 tail-feathers.

Small brown Martins, not unlike English Sand-Martins (probably *Cotyle serripennis*), were also common. Near San Pedro I saw also a number of small Black Swifts (*Chaetura*?) about the size of the Palm Swifts of Jamaica.

6. CEDAR BIRD. (*Ampelis cedrorum*.)

The only one I noticed and shot was at Siquatepeque.

7. BLACK-HEADED ORANGE-EATER. (*Saltator atriceps*.)

Not uncommon near Comayagua, which was the only locality where I observed them. I shot several, generally while feeding in the tops of orange trees. The feathers of the head were usually besmeared with the juice of oranges and other fruits.

8. SCARLET TANAGER. (*Pyrranga aestiva*.)

I shot one, a female, in an orange garden at Comayagua. They were frequently observed in other places ; but I had no opportunity of obtaining more specimens.

9. RED-BACKED TANAGER. (*Rhamphocelus passerinii*.)

Common near the Atlantic coast.

10. BLUE TANAGER. (*Tanagra diaconus*.)

Obtained by Mr. Edwards during his first visit to Honduras.

11. BLUE-HEADED TANAGER. (*Tanagra vicarius*.)

I shot one near the Lake of Yojoa, and saw several more. I believe they are not uncommon.

12. RAINBOW FINCH. (*Spiza ciris*.)

I saw and shot one of these beautiful birds in a garden near Comayagua.

13. GREAT CACIQUE. (*Cacicus montezumæ*.)

First seen at Taulevi ; and from there to the Atlantic they were very common. Sometimes they were single or in pairs, but more often in small companies. They were usually very tame, and would climb unconcernedly about the trees within a few feet of us.

14. GOLDEN BANANA BIRD. (*Icterus gularis*.)

This is probably the most beautiful bird in the country. They

were very abundant on the Pacific Slope. I did not see so many on the Atlantic side. They are fond of feeding on the fruit of the cactus; and the feathers on the head, and the interior of the gullet and stomach, are often deeply stained with its crimson juice.

15. GREAT CROW-BLACKBIRD. (*Quiscalus macrurus*.)

Common, and always to be found in and about the villages. They appear to be polygamous, as the male birds are generally attended by several females. A very fine male bird and his accompanying females used to frequent the court-yard of the Honduras Railroad Agency House in Comayagua, where we lived. They generally sat either on the roof of the house, or among the upper branches of some orange trees which grew in the yard. They had a most peculiar cry, not unlike the noise produced by the sharpening of a saw, only more prolonged.

Gosse's account of the manners and note of the Tinkling Grackle is applicable to this bird. I shot also at Comayagua a small Crow-Blackbird, in size and general appearance like the Tinkling Grackle. These, or other black birds, with shorter tails, resembling Starlings, were often seen in large flocks near the villages, and at sundown would collect in black masses on the tops of low trees close to the houses.

16. MEXICAN RAVEN. (*Corvus cacalotl*?)

I saw two Crows of a considerable size on the top of a lofty pine tree, growing on the highest ridge of mountains between Ootelma and Siquatepeque, near 5000 feet above the sea. If my mule had not been refractory, I should have shot one.

17. BLACK-HEADED BLUE JAY. (*Cyanocorax melano-cyaneus*.)

The only place where I saw these birds was in the pine trees on the elevated plain between Siquatepeque and Taulevi. They appeared to be tolerably plentiful.

18. SMALL CRESTED BLUE JAY. (*Cyanocitta coronata*.)

The above remarks are equally applicable to this bird. After I left the country, Mr. Edwards obtained several specimens of both species.

19. GREEN AND YELLOW JAY. (*Cyanocorax guatemalensis*.)

Several specimens were obtained by Mr. Edwards after I left the country.

20. CRESTED BLUE JAY: (*Cyanurus gubernatrix*.)

Plentiful in Tigre Island, and all the way from the Pacific coast to the mountains north of the plain of Comayagua, after passing which I saw no more of them; their place and duties being then taken up by the Brown Jay (*Psilorhinus morio*). They were a continual nuisance, being omnipresent, and positively haunting our path. Every bough was full of them, eternally shrieking and chattering. As we rode along they followed us, from tree to tree, until we reached another troop of them, who in their turn would take up the pursuit. When out shooting, they would pursue me in the same way, flying over my head and betraying my presence by their chattering. The birds in Honduras are seldom shot at, and consequently are not wary; otherwise these Jays would have effectually put them on their guard.

The squeak of a penny trumpet, which I often carried in my pocket, would quickly assemble dozens of them from the recesses of the woods, even if, at the time I sounded it, there were none within my sight or hearing.

21. BROWN JAY. (*Psilorhinus morio*.)

This Jay was first seen at Taulevi, and thence to the Atlantic was very common, generally to be seen or heard shrieking in the bushes by the road-side; but the experiment of the penny whistle was not equally successful with them. From the time they were first met with, I *never saw one* of the preceding species. I regret I had not time to preserve the skin of one of them.

22. THE MEXICAN LARGE-BILLED TYRANT. (*Scaphorhynchus mexicanus*.)

I did not observe this bird before I got to Taulevi; but afterwards it was not uncommon.

23. GREY TYRANT. (*Tyrannus melancholicus*.)

Common; usually to be seen in the evening, sitting on the tree-tops and facing the wind.

24. YELLOW-BELLIED TYRANT. (*Myiarchus laurencii*.)

Obtained in Tigre Island.

25. BLACK-HEADED LONG-TAILED TYRANT. (*Milvulus monachus*.)

This bird was first seen by me on the plain of Comayagua, near Langui. Afterwards I saw great numbers at Agua Azul, near the Lake of Yojoa, where I obtained several specimens, as they were sitting on the tree-tops about sundown. The tail-feathers of some are nearly 12 inches long.

26. GREY-HEADED LONG-TAILED TYRANT. (*Milvulus forficatus*.)

At Langui these birds were very plentiful; and I also saw them, in fewer numbers, in other localities. The best time to obtain these and all the other Fly-catchers was in the evening, just before roosting-time, when they would assemble on the tops of favourite trees, and remain until nearly dark. They then go off into the woods. I generally observed this and the preceding species on open ground not much encumbered by trees or brushwood.

27. GROUND NIGHT-RUNNER. (*Nyctidromus* — ?)

I obtained two species of this genus in Tigre Island, and also saw them at Comayagua. They make a great noise, and fly about under the trees after insects. They are easily distinguished when flying, by the white marks on their wings. Directly they pitch on the ground they are invisible. One evening when I was out bird-shooting in Tigre Island, perhaps half an hour before sunset, I saw a great number, hunting moths over a large piece of cleared ground. There must have been some hundreds of them. Their pace was great, like that of the swiftest Hawks, and their flight not unlike that of Swallows. All birds of this genus are very difficult to skin, as their skins are very tender, and their bodies are generally very fat and greasy; they are, however, not so bad in this respect as Trogons.

28. BLUE-HEADED HUMMING-BIRD. (*Cyanomyia cyanocephala*.)

Occasionally seen, but not common. Obtained at Siquatepeque.

29. BROWN HUMMING-BIRD. (*Amazillia corallirostris*.)

This Humming-bird, of very plain plumage, is the only one which I observed in any numbers, and that only in certain localities. There were some in Tigre Island, and I saw them here and there in our march across the country. I found them most abundant near Comayagua, 1900 feet above the sea. They were very plentiful on the plain near the town, and not far from the Campo Santo, where the ground was tolerably open, and the cactus grew abundantly. There I observed hundreds hovering about the flowers of the cactus.

Upon the whole I saw very few Humming-birds in Honduras, and fewest on the Pacific Slope. They are probably more numerous on the Atlantic side, where there is more vegetation and more flowers, and the atmosphere is more humid. In Tigre Island there were but few flowers in the woods, and Humming-birds were scarce. They were usually in lofty trees, where it was very difficult to see them, and still more so to find them when shot; for they fall into the thick bushes, and are so small that a leaf covers them; besides, if not picked up at once, a big ant may carry them off. Many that I shot I was unable to find. It is also by no means easy to kill them so as to obtain good specimens. I have never found anything but *very small* shot answer this purpose; and even then one may have to kill several before obtaining a specimen that will yield a really good skin. When in Jamaica, I made several experiments in shooting Humming-birds. I could get no fine shot (which, by the way, is an article very difficult to obtain except in large towns), and was therefore obliged to look out for an efficient substitute. I first tried rape-seed; but it did not answer: it was too light, and had no power of penetrating, even with a large quantity of powder and at the shortest distance. Certainly, I sometimes killed birds when I used it; but I suspect that it was only when they were struck by the wadding, for they were so much damaged as to be useless. For every one I killed, at least three went off unhurt, although only a few feet from the muzzle. Then I tried emery powder, and that answered tolerably well. I killed some small birds with it, and that without materially damaging their plumage,

but it did not appear to be effective beyond 15 feet or thereabouts.

I have heard persons recommend *water* for knocking down Humming-birds. It may answer, but requires an old gun, and Humming-birds to be far more plentiful than I ever found them. Moreover, very close quarters are needful. The Humming-birds I used to shoot were often high up in trees. Now, if water is to be used, it is obviously essential to success that Humming-birds be plentiful, and that they frequent flowers in a garden, or low bushes and shrubs, so that one can approach very close; and in such situations they may be more easily caught in a butterfly-net. Moreover, when a gun is charged with water, it will not do to wait half an hour or more for a chance of discharging it. In Jamaica I found great difficulty in securing good specimens of the minute Vervain Humming-bird (*Mellisuga humilis*), and still more in the case of the Long-tailed Humming-bird (*Trochilus polytmus*), whose long tail-feathers were liable to be cut by the shot, while the remainder of the plumage was left uninjured.

I recommend all persons going on bird-shooting expeditions to take with them a good supply of the finest shot procurable. I suffered great inconvenience from the want of it. Large shot is generally to be obtained in abundance.

30. THE WHITE HUMMING-BIRD. (*Thaumatias candidus*.)

I saw but very few specimens of this Humming-bird. The three species here mentioned are the only *Trochilidæ* that came under my notice while in Honduras.

31. BLACK-CHINNED JACAMAR. (*Galbula melanogenia*.)

I did not see these birds until near the Atlantic coast, where they were pretty common and very tame. They were generally seen sitting on low bushes, ready to dart on any insects that might come in their way. They are easy birds to preserve, as the skin is tough and comes off without difficulty. Waterton gives a good description of them in his 'Wanderings.'

32. BELTED KINGFISHER. (*Ceryle alcyon*.)

Seen on several occasions, but they were wild, so I was unable to obtain a specimen.

33. SMALL GREEN-AND-WHITE KINGFISHER. (*Ceryle americana*.)

Is about the size of our English Kingfisher. I saw several of them at the Lake of Yojoa.

34. FLAT-BILLED MOTMOT. (*Prionirhynchus carinatus*.)

The only bird of this species I saw was in the densest part of the forest between Taulevi and the Lake of Yojoa. It was sitting on a low branch of brushwood beneath some lofty Mahogany trees. I had some difficulty in shooting it without running the risk of entirely destroying the plumage. This I found to be a very common occurrence; for the forest is so dense that often one cannot see birds unless close to them, and they are so tame that they do not care to move. The difficulty consists usually, not in approaching birds, but in getting sufficiently distant from them to shoot, and at the same time keeping them in sight.

I have every reason to remember this bird; for I skinned it by the roadside, on the saddle of my mule, being subject to the attacks of myriads of mosquitoes—so much so that I was several times on the point of throwing it away. As it is the only example known of the species, besides one at Brussels, I am glad I did not carry my intention into effect. I saw no other *Momotidae* in Honduras; but Mr. Edwards obtained near Comayagua the Azure-browed Motmot (*Eumomota supercilialis*) and the Blue-naped Motmot (*Momotus lessoni*). He found them plentiful, and on one occasion saw seven sitting together on the same bough.

35. GRACEFUL TROGON. (*Trogon elegans*.)

I saw several of these birds in the forest on the plain of Comayagua, and have no reason to suppose that they are otherwise than common.

36. BLACK-HEADED TROGON. (*Trogon melanocephalus*.)

This Trogon was common in Tigre Island. I also obtained it near Taulevi. Trogons are very difficult birds to skin, their skins being as tender as damp tissue-paper, and their feathers dropping off at the slightest touch, even as they fall to the ground. These birds are usually seen sitting motionless on the

lower branches of trees, generally in dense and shady thickets, and are to be shot without difficulty. The Quesal (*Pharomacrus paradiseus*) is, I believe, found in the lofty mountains to the south and east of the plain of Comayagua.

After I left the country, Mr. Edwards returned to Comayagua. He ascended these mountains, and found a tableland at the top, covered with forests of high trees, and little or no underwood. He there saw monkeys, and many species of birds which we had not met with on the plain below. He also saw the long tail-feathers of the Quesal lying on the ground; he showed them to an Indian hunter who was with him, and was told by him that he had often shot them. This I consider to be conclusive evidence.

The forests of Honduras are so extensive and dense, that it requires a long residence to explore them satisfactorily, and there is no saying positively what tropical birds may not be found in them.

37. LONG-TAILED CUCKOO. (*Piaya thermophila.*)

Common. They frequent localities where the brushwood is thick and the trees are moderately high; they are showy birds, and easily skinned.

38. GROUND CUCKOO. (*Piaya erythropygia.*)

The only bird of this species which I saw and shot was not far from Yojoa. It was very tame, and walking beneath brushwood on some very stony ground. I could not get a fair distance from it, so was obliged to shoot when too close. The skin was consequently so damaged that it became spoiled by the heat of the weather before I had a chance of preserving it.

39. YELLOW-BILLED CUCKOO. (*Coccyzus americanus.*)

I shot a Cuckoo in Tigre Island closely resembling a specimen of this species obtained in Jamaica.

40. SAVANNAH BLACKBIRD. (*Crotophaga sulcirostris.*)

Very common everywhere and very tame. To be seen in small companies, from five or six to a dozen, sitting on fences and low bushes. Perhaps the most common bird in Honduras. Its habits resemble those of *C. ani*, as described in Gosse's 'Birds of Jamaica.'

41. COLLARED TOUCAN. (*Pteroglossus torquatus.*)

The only Toucan I saw and shot was on level ground not far from Omoa, where the forest was dense and the trees were lofty. I heard the cry of a strange bird in a thick tree, and stopped my mule; but it was some time before I could distinguish it sufficiently to shoot. It was the last bird I shot in Central America. I heard the cries of more at the same spot, and have no doubt that Toucans of various species are common on the Atlantic coast. Mr. Edwards saw a pair of Toucanets near Yojoa.

42. GUATEMALAN WOODPECKER. (*Dryocopus guatemalensis.*)

Not common. The one I shot was near San Pedro. This bird has a long red crest—in the female black on the forehead and red behind.

43. SCAPULAR WOODPECKER. (*Dryocopus scapularis.*)

Common, especially in Tigre Island. It is smaller than the preceding; and its chin is striated with white and black.

44. BARRED WOODPECKER. (*Centurus santacruzi.*)

Very abundant wherever I went, and the most common of any *Picidae* in Honduras. They are very fond of feeding on the fruit of the cactus.

45. YELLOW-BELLIED WOODPECKER. (*Picus varius.*)

I shot this species in some pine trees near Siquatepeque.

46. JARDINE'S WOODPECKER. (*Picus jardinii.*)

Shot near the same place as the preceding.

47. CINNAMON WOODPECKER. (*Celeus castaneus.*)

I saw only two of this species; they were near Potrerillos, on the Atlantic slope.

48. RED-AND-BLUE MACCAW. (*Ara macao.*)

This Maccaw is plentiful throughout the whole country, and generally to be seen in pairs, but sometimes in companies of from six to twelve. I have seen as many as thirty together about roosting-time, flying towards some lofty trees situated in the forest, which no doubt they were in the habit of fre-

quenting at night, having assembled for that purpose. They are in the habit of feeding in the maize fields, morning and evening, and are not difficult of approach. If one is wounded, its shrill screams attract others, and they wheel overhead, giving opportunities for fresh shots. In this way I shot three within five minutes, from the back of my mule, and without moving from one spot. This was near Comayagua. They are strong on the wing and high-flyers. Their brilliant plumage and long tails have a splendid effect in tropical forest scenery, forming a strong contrast to the deep green of the foliage, and a brilliant addition to the landscape. I have seen them up in the pine-ridges, and recollect riding beneath a pair sitting so close together on the branch of a pine tree overhanging the road, that I could have killed both at one shot. They were abundant in Tigre Island. I there shot one out of a flock of seven flying over my head. He was only winged; and I did not know how to handle him so as to save my fingers. I did not like to rap him on the head, lest I should spoil his plumage; so I got his head into a noose of my pocket-handkerchief, and brought him into the house—not in silence, for he screamed most vociferously. When there, the difficulty was to kill him. Some long pins were thrust into his head, but the only effect was to make him more lively and to squall the louder. At last I dipped a feather in nitric acid; and while he was in the act of climbing up a bedstead, and screaming with beak wide open, I popped it down his throat. He released his hold of the bedstead, gave a few kicks and struggles, turned on his back, and died.

49. BROWN-BREASTED GREEN PARRAKEET. (*Conurus astec.*)
Shot near Comayagua, and not uncommon.

50. GREEN PARRAKEET. (*Conurus petzi*?)

Common. Obtained on the Pacific Slope. Parrakeets are very numerous in Honduras, but they appeared to resort more to the recesses of the forest than to the vicinity of habitations. They fly high, and very fast, with a quick motion of the wings, screaming all the time, often wheeling in the air like flocks of Sandlarks. Parrots have a much slower flight, and slower flapping of the

wings. Maccaws fly very high. Their flight is slower than that of either of the preceding, and the motion of the wings is slow and heavy. Still they are powerful-winged birds, and may often be seen flying over a widely intervening space between high mountains. Parrots and Parrakeets are good for food; but good cooking is indispensable to make them palatable, and that is rarely met with in Honduras. I never tasted Maccaws; but the natives ate those I shot.

This species measures 9 inches in length. Irides yellow, yellow skin round the eyes bare of feathers; beak white, forehead yellow, top of head blue; upper surface of body bright green; quill-feathers bright blue, green at the bases; under part of body greenish-yellow; tail-feathers green; feet and legs whitish.

51. LITTLE GREEN PARRAKEET. (*Psittovius tovi.*)

I observed flocks of this species in Tigre Island, but not near the habitations.

52. SMALL GREEN PARROT. (*Chrysotis albifrons.*)

The only place where I saw this species was between Yojoa and San Pedro. They were assembling in numbers at roosting-time, when I procured a specimen.

53. YELLOW-NAPED GREEN PARROT. (*Chrysotis auripalliata.*)

Very plentiful in Tigre Island, but I did not observe it elsewhere, nor did I see any large Parrots after I left the coast until I arrived at Yojoa, where there is a Parrot much resembling this in plumage, but rather smaller, with the yellow on the fore part of the head instead of behind. They were flying in great numbers towards their roosting-places, and passed close overhead; but it was unnecessary to shoot one, as I saw many in the town in a state of domestication. In common with the other *Psittacidæ*, they are very noisy early in the morning and in the evening. At these times they feed in the maize fields, and are easily shot. In Tigre Island I have seen them fly so close to the house that I could have shot them from the windows. They sit on the trees like pigeons, and do not appear to be frightened by the report of a gun. When they are in the tree-tops it is difficult for any one standing beneath to perceive them,

as their green plumage cannot be distinguished from the foliage. I have often stood beneath a tree full of them, without being able to see one. They roost in flocks. They have favourite roosting-places among lofty trees, where they assemble just before dark, and may be seen making for these common centres in great numbers, chattering and screaming as they fly.

[To be continued.]

XIII.—*On the Nidification of certain Birds in North-eastern Africa.* By BARON RICHARD KÖNIG VON WARTHAUSEN.

(Plate V.)

IN the following paper, the friends of Oology will receive descriptions of the eggs of certain birds of North-eastern Africa. They are nearly all as yet undescribed, and may prove to be of greater interest from the fact that most of them belong to species common to the European Fauna. Some of them came into my possession through the special kindness of Dr. Theodor von Heuglin, Austrian Consul at Chartum in the Sudan, who, also, has drawn the figures to illustrate the paper*; whilst the other specimens were collected by Herr Emile Wilke for me, and under the direction of Dr. Theodor von Heuglin.

I have used the old French duodecimal measurement in my descriptions.

1. *FALCO TANYPTERUS*, Licht. [*F. cervicalis*, A. Brehm et Heuglin (non Licht.): *F. biarmicus*, Brehm in Naumannia (non Temm.).]

This bird breeds in Egypt, on the Pyramids of Gizeh (Djiseh) and Dachschor, and on the Moxatam Mountains. Several nests, taken between the 14th and 26th of March 1858, contained from three to four fresh eggs. They are deposited, sometimes in a cleft on the naked stone, surrounded by a little sand only or by some small branches; sometimes in a deserted and restored nest of *Milvus parasiticus*, which bird breeds in the same locali-

* We much regret being unable to publish more than one of the nicely executed plates which were intended to illustrate Baron R. König von Warthausen's valuable paper.—ED.